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 TI Preparation of lower aliphatic alcohol mixtures from synthesis gas  
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AB A process is provided for preparation of mixts. of aliphatic C1-4 alcs., with MeOH

and isobutanol predominating, from a mixture of CO, H<sub>2</sub>, and CO<sub>2</sub> (synthesis gas) by contact with a **catalyst** CuxZryMnzAv (x, y, z, v = mol fraction; x = 0.377-0.566, yr = 0.243-0.446, z = 0.204-0.422, v = 0.010-0.169; A = **alkali** metal, preferably K) prepared from the corresponding metal oxides: 30-45 weight% CuO, 32-55 weight% ZrO<sub>2</sub>, 14.5-25 weight%

MnO and 0.5-8.0 weight% **alkali** metal oxide. The **catalyst** is reduced directly by synthesis gas at pressures up to 5 MPa at 160-280°, whereas the process to prepare aliphatic alcs. is carried out at 250-400° under 10-30 MPa pressure and 5000-20000 h-1 syn gas loading.